DOCUMENT RESUME

ED 467 188 PS 030 575

AUTHOR	Sutherland, Carol; McCroskey, Jacquelyn; Halfon, Neal
TITLE	The Challenges of Measuring the Impact of Proposition 10. Building Community Systems for Young Children.
INSTITUTION	California U..iv., Los Angeles. Center for Healthier Children, Families and Communities.
SPONS AGENCY	David and Lucile Packard Foundation, Los Altos, CA.
PUB DATE	2001-08-00
NOTE	57p.
AVAILABLE FROM	UCLA Center for Healthier Children, Families and Communities, Box 951772, Los Angeles, CA 90095-1772 ($5). Tel: 310-206-1898; Fax: 310-206-3180. For full text: http://healthychild.ucla.edu.
PUB TYPE	Guides - Non-Classroom (055) -- Reports - Descriptive (141)
EDRS PRICE	EDRS Price MF01/PC03 Plus Postage.
DESCRIPTORS	Counties; *Evaluation Criteria; Evaluation Methods; *Evaluation Problems; *Family Programs; Program Evaluation; Well Being
IDENTIFIERS	California; Family Support; *Indicators

ABSTRACT

In compliance with California's Proposition 10 (Children and Families First Act), county commissions are being asked to monitor what differences the family support programs they are funding are making in the lives of the children and families they serve. Each commission has the responsibility of selecting a set of indicators to measure the impact of Proposition 10 on the lives of all children from birth to age 5 and their families, as well as performance measures to assess the changes in the client population targeted. This report provides a historical overview of how indicators have been used to measure child and family well-being and recent innovations in monitoring strategies necessitated by results-based decision making. The report also discusses approaches that can be used to facilitate the indicator selection process, and offers recommendations for funding and using results-based decision making to build effective monitoring efforts. Following an introduction, the report reviews research to date on indicators and results-based decision making. The next section of the report explores use of results, indicators, and performance measures, including language issues, use of a conceptual framework, and criteria for indicator selection. Issues of integrating and coordinating data collection are then explored. The report concludes with recommendations on funding and using results-based decision making, including investing in a county-wide and state-wide data infrastructure, and developing a research agenda. The report's nine appendices include a language translation key for Proposition 10 guidelines terminology; examples of indicators of short-term results; a matrix of existing child well-being indicators; and examples of indicators related to service integration, accessibility, and cultural appropriateness. (Contains 41 references.) (HTH)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 467 188

PS 030575

UCLA Center for Healthier Children, Families and Communities

Building Community Systems for Young Children

Building Community Systems for Young Children is a series of reports designed to support the implementation of Proposition 10: The California Children and Families Act. Each installment is written by a team of experts and provides comprehensive and authoritative information on critical issues concerning young children and families in California.

August 2001

The Challenges of Measuring the Impact of Proposition 10

By

Carol Sutherland, PhD, MPH
UCLA Center for Healthier Children, Families and Communities

Jacquelyn McCroskey, DSW
USC School of Social Work

Neal Halfon, MD, MPH
UCLA Center for Healthier Children, Families and Communities

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Ericka Tullis

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

BEST COPY AVAILABLE

SUGGESTED CITATION:
Sutherland C, McCroskey J and Halfon N. *The Challenges of Measuring the Impact of Proposition 10,* in N Halfon, E Shulman and M Hochstein, eds., Building Community Systems for Young Children, UCLA Center for Healthier Children, Families and Communities. 2001.

Copyright © 2001 UCLA Center for Healthier Children, Families and Communities.

Edited by Neal Halfon, MD, MPH; Ericka Shulman, MPP; and Miles Hochstein, PhD.

Building Community Systems for Young Children has been made possible through generous support from the David and Lucile Packard Foundation.

Permission to copy and disseminate this document is granted as long as proper credit is given to the UCLA Center for Healthier Children, Families and Communities.

Single copies of this report are available for $5 each by writing the UCLA Center for Healthier Children, Families and Communities, Box 951772, Los Angeles, CA 90095-1772. Phone (310) 206-1898. This document may be found on the web site of the UCLA Center for Healthier Children, Families and Communities (http://healthychild.ucla.edu).

Table of Contents

I. Introduction 1

II. Research to Date on Indicators and Results-Based Decision Making 3

III. Using Results, Indicators and Performance Measures 6

IV. Issues in Integrating and Coordinating Data Collection 16

V. Recommendations on Funding and Using Results-Based Decision Making 31

VI. Appendix A: Language Translation Key 33

VII. Appendix B: Examples of Indicators of Short-Term Results from the State Commission "Results" Document 34

VIII. Appendix C: Matrix of Existing Child Well-Being Indicators 37

IX. Appendix D: Data Development Agenda 40

X. Appendix E: Examples of Indicators Related to Service Integration, Accessibility and Cultural Appropriateness Presented in the State Commissions *Results* Document 41

XI. Appendix F: Principles for Using Outcomes and Indicators 42

XII. Appendix G: Resources 43

XIII. Appendix H: The Multiple Determinants of Health Model 48

XIV. Appendix I: Influence of Risk-Reduction and Health Promotion Strategies on Health Development 49

XV. References 50

The Challenges of Measuring the Impact of Proposition 10

I. Introduction

The California Children and Families Act (Proposition 10) provides a historic opportunity to positively affect California's youngest children and their families. The funds available to counties from tobacco tax revenue are earmarked for programs and services for children from the prenatal period to age 5, a time of critical importance for their successful physical, emotional and social development. The goal of the Children and Families Act is to provide the resources and support families need so that their children are healthy and ready to succeed by the time they enter kindergarten. The current array of programs and services for children and families is often fragmented, difficult to access or non-existent for the youngest ages, and tends to focus on providing services, but not necessarily on tracking results. Proposition 10 offers planners, policymakers, service providers and communities an opportunity to go beyond "business as usual") to create a comprehensive and integrated system of support and care for families with young children which is family-friendly, culturally sensitive and accountable.

To receive their allotment of funds from the California Children and Families State Commission, count Proposition 10 commissions had to submit an initial strategic plan and each year must review and update this plan. As part of their planning process, county commissions are required by the act to identify not only the programs, services and projects they will fund to accomplish their goals, but also how they will determine the success of these programs, services and projects using appropriate, reliable measures.[1]

Most service providers for children and families are accustomed to using data *after* programs have been implemented to evaluate their success, and often success is measured in terms of the quantity of services delivered. However, Proposition 10 commissions are being asked to do something different — to monitor what difference the programs they are funding are making in the lives of the children and families they serve. The Children and Families First Act requires each commission to identify the results they hope to achieve first and to develop a "results accountability framework"[2] to show how they will monitor the impact of their funded strategies on these desired results. This approach requires that Proposition 10 commissioners and planners *begin* the planning process not by deciding what programs they will fund, but by defining desired results (e.g., all children enter school healthy and ready to learn). They will then select indicators to measure progress toward the desired results (e.g., the percentage of children fully immunized by age 2, the percentage of children in quality day care), and then shape programmatic strategies based on "what works" to achieve those desired results (e.g., home visitation for new mothers, training of child care staff, creation of family resource centers, ensuring access to health care for all children, etc.). Thus, the focus shifts from an

---

[1] California Children and Families Commission, *Guidelines: A Resource for Developing Proposition 10 Strategic Plans*, 1999.

[2] For a full description of the results accountability framework, see a companion brief in this series: Friedman, M. *Results Accountability for Proposition 10 Commissions: A Planning Guide for Improving the Well-Being of Young Children and Their Families*, in N Halfon, E Shulman, M Hochstein and M Shannon, eds., Building Community Systems for Young Children, UCLA Center for Healthier Children, Families and Communities, 2000.

emphasis on the services provided — "What activities should be carried out? What should be done?" — to a different consideration: "Ultimately, what results, what impact, what changes in the conditions of children and families do we expect to see from the activities performed?"

In order to monitor progress towards the desired results, each county commission has the responsibility of selecting a set of indicators to measure the impact of Proposition 10 on the lives of *all* children 0-5 and their families, as well as performance measures to assess the changes in the client populations targeted by specific programs, services and projects. Results from a survey[3] of 54 of the 58 counties in California indicate that the vast majority of counties are focusing on the four results areas identified by the State Commission *Guidelines*: Improved Family Functioning (98%), Improved Child Development (98%), Improved Child Health (98%), and Service Integration (85%). However, most counties (59%) have not identified a set of indicators to track progress towards those results. Many reported indicator selection, standardization and collection as a major challenge, and many are waiting for the state reporting requirements to be developed before fully developing their own evaluation systems. A large number of counties (44%) do not yet have an internal or external evaluator.

The California Children and Families Commission (CCFC) is in the process of developing two tools to assist the counties in their monitoring and evaluation efforts. The first, the *County Results and Indicators Data Collection Tool,* is still being finalized. This tool draws heavily from the State Commission's *Results Document* and site visits conducted by CCFC and SRI International to six counties beginning their data collection efforts. It is designed as a first step toward establishing a common set of indicators that could be used to measure the results across counties. It is designed to be used with grantees to collect basic information on short-and long-term results, strategies being implemented, and populations being served.

The second, the *Annual Report,* was developed collaboratively by CCFC and the California Children and Families Association (CCAFA) to assist the counties in reporting their progress to CCFC. The first year's report (2001) is designed to standardize the format in which information is submitted to CCFC. County commissions have an opportunity to describe their major accomplishments and the current status of their reporting and data collection efforts for strategies, results and indicators. The second year report (2002) will incorporate more detailed information on the population being served (i.e., ethnicity, special needs, teen mothers, etc.) as well as the specific indicators of progress towards those results.

In addition to tracking the success of their funded programs, county commissions must also determine how programs, services and projects relating to early childhood development will be integrated into a consumer-oriented and easily accessible system. Data development, collection and analysis is exceedingly important for monitoring and demonstrating results, and is a key strategy for providing the information base that is essential for building integrated service systems for children and families.

---

[3] California Children and Families Commission Research and Evaluation Unit, "An Overview of Three Major Evaluation Initiatives." Presentation, May 2, 2001.

In summary, the county commission's charge related to monitoring includes:

- tracking outcomes for the whole population of families with young children to monitor progress toward desired results and to inform the strategic planning process;
- monitoring the effectiveness of specific programs and using that information for continuous quality improvement of the programs and to inform the commission's funding decisions; and
- measuring overall progress towards integration of services and systems.

This paper will begin with a historical overview of how indicators have been used to measure child and family well-being and recent innovations in monitoring strategies necessitated by results-based decision making. We will then discuss the common sources of language confusion in the use of indicators and performance measures; approaches that can be used to facilitate the indicator selection process; and the range of traditional and new measures of child health and development that might be considered useful in monitoring child and family well-being. We will then know how outcomes and indicators can be used for planning and monitoring efforts; the challenges inherent in using existing information systems, and the opportunities for developing new data sources and creating a data infrastructure. Last, we will turn to the importance of communicating the information contained in the data in a way that "tells the story" of Proposition 10 to many different constituencies with different perspectives, values, assumptions and attitudes, and identify tools that can be used to facilitate this process. We will conclude with recommendations for how to fund and use results based decision-making to build effective monitoring efforts.

II. Research to Date on Indicators and Results-Based Decision Making

Indicators of child well-being

In *The Measure of Reality*, Alfred W. Crosby asserts that the "distinctive intellectual accomplishment" of Western Europe during the Middle Ages was to "bring mathematics and measurement together and to hold them to the task of making sense of a sensorially perceivable reality" (Crosby 1997: 17). It is certainly true that we in the West have great faith in quantification, so much so that we tend to doubt the reality of that which cannot be quantified. The quantification of social conditions poses so many challenges, however, that no fully satisfactory and universally accepted method has emerged.

In America, the New Frontier and Great Society programs of the 1960s and 1970s raised the question of how to quantify social well-being in relation to "social indicators" that could track the impact of technological progress on social conditions (Shonfield & Shaw 1972). Government agencies and public-interest groups have published reports analyzing trends in indicators over time (Andrews 1996; Dear 1996; U. S. Department of Health and Human Services 1998). Advocates for children and families readily adopted this notion, using such indicators to measure changes in the quality of life for children, youth and families (Lasch & Siegel 1976; Wald & Kirst 1989).

Initially, indicators about children's lives were largely based on statistics about mortality and survival. Over time, measures of disease, disability and dysfunction have been added. More recently, with widespread adoption of such concepts as "resiliency" and "protective factors," there has been increasing interest in developing new indicators to measure the assets and capacities of children, families and communities, in addition to needs, to present a more balanced picture of children's well-being (Ben-Arieh 2000; Search Institute).

One of the defining influences on children's policy development in the 1970s and early 1980s was the emergence of the Children's Defense Fund as a prominent voice for children and CDF's use of national and state data to profile the needs of America's children (Halfon et al. 1998). In 1984, CDF began issuing a yearly special report entitled *The Health of America's Children: The Maternal and Child Health Data Book*, along with other reports that described a wide range of health and social indicators for the country as a whole, as well as for individual states.

During the early 1980s, children's councils, advisory boards, and planning agencies were established in many states and communities to monitor and publicize the conditions of children's lives (Smecker 1989). Prominent examples of these were found in Ohio and Illinois, and in cities such as New York, Los Angeles, Chicago and San Francisco (Halfon et al. 1998). The *State of the Child Report (Illinois)* was a three-volume report issued over several years that set the stage for others that would follow, including the *Conditions of Children* report in California (Wald & Kirst 1989).

In the early 1990s, Children Now, a California children's advocacy organization, produced a statewide children's report in an entirely new format, the "report card," using letter grades. More recently, a number of children's "scorecards" have emerged that use indicators to track and compare community conditions for children and families (Gardner 1994; Santa Cruz County Council for At-Risk Youth 1990; Orange County Children's Services Coordination Committee 1999; Kids Network/UCSB Department of Education 1998; United Way of Greater Los Angeles and Los Angeles County Children's Planning Council 1999; County of San Diego Health and Human Services Agency 2000.) A resurgence of interest in using such indicators was marked by a 1994 national conference on the intellectual and practical challenges of using indicators of children's well-being (Hauser, Brown & Prosser 1997). A recent inventory of child, youth and family indicator projects found over 90 such efforts across the country (Child Trends 2000).

KIDS COUNT, sponsored by the Annie E. Casey Foundation, is perhaps the best-known national report on child and family indicators. The foundation funds groups in all 50 states to annually produce comparable data on a core set of indicators. These statewide scorecards have helped to familiarize a large number of people with outcomes and indicators, sources of available data, some of the technical issues involved in trying to track change over time, and efforts to use indicator data in advocating to improve the conditions of children.

Performance measures

While indicator reports such as those described above present a profile of health and well-being for the whole population, performance monitoring uses measures to systematically assess the impact of

particular services on a particular target population. The use of performance measurement has grown considerably over the past three decades. Performance monitoring originated in the business world, has subsequently been adopted in health care and social services, and is now being more widely used for government programs (Institute of Medicine 2001).

Indeed, interest in performance measurement has increased during the last decade at every level of government (Institute of Medicine 1997). At the federal level, the Government Performance and Results Act of 1993 required regular performance reporting by all federal agencies. A recent study found that 47 of the 50 states use results-based budgeting techniques with associated performance measures (Melkers & Willoughby 1998). Another study found that about 40 percent of municipalities not only report that they use such measures, but the authors believe that they make "meaningful use of performance measures in their management and decision processes" (Poister & Streib 1999: 332).

This widespread use of performance measurement has resulted in the development and adoption of a range of techniques for continuous quality improvement based on outcomes and results based accountability. These new measurement techniques has influenced how factory managers manage production, how hospital administrators evaluate the performance of their cardiac surgery team, and how policymakers examine the potential and results of different legislative actions. Some of these performance-monitoring activities have been formalized into systems of ongoing measurement and accountability. For example, in the health care arena, the National Committee for Quality Assurance (NCQA) has created a measurement set called the Health Employers Data Information System (HEDIS) that is part of a performance monitoring process widely used throughout the United States. In fact, all state Medicaid programs use the HEDIS monitoring system to evaluate the performance of their managed care contracts. For children, Medicaid HEDIS measures include the receipt of well-child care and immunizations. Recently, HEDIS has adopted a new survey to monitor parents' experience and evaluation of health care for children with chronic and disabling medical conditions.

Connecting these developments, many researchers and government agencies are now working to identify indicators that would not only measure the performance of social programs (their compliance with rules and regulations), but would also show how these programs help to improve the lives of families and children through results accountability. Proposition 10 requires a results accountability approach to guide commissions "through dynamic cycles of planning, allocation, implementation and evaluation" (California Children and Families Commission 1999). State and county commissions can build on the lessons learned from previous efforts – combining knowledge about how to identify meaningful indicators, share information with the public, track performance measures over time, and assess the impact of services – in order to most strategically improve conditions for young children and their families.

While the results accountability model adopted by the commission is a promising approach, it is still in development. There are a number of examples from around the country cited as "turn the curve" success stories (where interventions have changed the direction of a trend, turning it toward desired

results).[4] However, not much evidence for the effectiveness of results accountability is available in published studies. One of the challenges of the results accountability approach is the difficulty of achieving accountability as one moves from individual programs to sets of programs or integrated systems, where determination of "causes" is much more complex. Another challenge is to shift the focus from process measures (e.g., services offered) to "true" outcome measures (e.g., the well-being of children and families). The experiences of Proposition 10 county commissions in implementing this approach to results accountability will provide a valuable testing ground and feedback on its usefulness from a broad range of contexts, including different populations and varying resources, in California's 58 counties.

III. Using Results, Indicators and Performance Measures

Language issues

A potential pitfall of using the results accountability framework is the confusion that can arise when different terminology is used by different people to refer to the same underlying concepts. Counties should use terms that make the most sense to them. However, it is important that, once those terms are agreed upon, they be used consistently. Appendix A provides a crosswalk between terms and definitions related to results accountability used in the State Commission *Guidelines* and some corresponding terms commonly used by others involved in results accountability and strategic planning.[5]

In this paper, we use the term *indicator* to refer to measure of the extent to which *results* (i.e., what the county as a whole is striving for) are being achieved with regard to the whole population. For the purposes of Proposition 10, each commission will select a relatively short set of indicators to reflect the health and well-being of all children and families in the county, with an emphasis on results that are being targeted by Proposition 10 initiatives. *Performance measure* refers to those measures used to determine whether programs, services or projects (*strategies*) are achieving their program *results* with the targeted population (what the funded community agencies will be held accountable for). Performance measures include both the *quantity* of services provided (e.g., number of women served by a residential treatment program for substance-abusing pregnant women) as well as the *quality* of those services (e.g., percent of babies born drug-free among the women participating in the treatment program).

The distinction between measures of the status of the whole population vs. measures of the performance of specific agencies/programs is an important one and, if not clearly articulated, tends

---

[4] For examples of Turn the Curve Success Stories, see The Results and Performance Accountability Implementation Guide at www.RAGuide.org.

[5] A related "crosswalk" with a somewhat different orientation can be found in Friedman, M. *Results Accountability for Proposition 10 Commissions: A Planning Guide for Improving the Well-Being of Young Children and Their Families*, in N Halfon, E Shulman, M Hochstein and M Shannon, eds., Building Community Systems for Young Children, UCLA Center for Healthier Children, Families and Communities, 2000.

to create confusion for planners. A results accountability framework should include both types of measures. For some measures, there may be overlap in the indicators/performance measures selected to track both program and population results (e.g., low birthweight can be tracked for the population as a whole as well as for the recipients of specific prenatal services); however, for the population as a whole, the indicator will refer to results for the entire population, whereas for a specific program or service, the indicator will refer to a subset of the whole population — those members of the whole population who have participated in a particular service or program.

In performance monitoring, it is important to remember that agencies are accountable for their own performance with the families they see, not their impact (or lack thereof) on the whole population. Even the most successful agency or program will not be able to improve conditions in the whole population by itself. For example, an agency may be successful in preventing crime among youth in their target population, but the overall crime rates in the community served or in the county may not improve or may even worsen. Possible explanations for the lack of an impact on the whole population are: not enough programs are covering enough of the population to work on the issue effectively; more time is needed for improvement to show in the statistics; the measures used to discern changes are not sensitive or appropriate; or the intervention was not focused enough on the key causes of the problem. On the other hand, if an improvement *is* noticed in the whole population, it will often be difficult to determine the cause. For example, a drop in crime rates throughout the county may be due to larger forces such as the improved economy rather than specific interventions with at-risk youth. Ideally, with enough agencies working effectively under the auspices of Proposition 10, there will be a measurable impact on the whole population or on specific communities or groups, and perhaps with the development of improved data capacity over time, agencies will develop the ability to link program performance to population results.[6]

Selecting indicators

An indicator is a measurement that can be used to track changes in conditions over time. "Generally, an indicator focuses on a small, manageable, and telling piece of a system to give people a sense of the bigger picture." (Norris et al. 1997). For example, a frequently used indicator is the infant mortality rate, which is commonly thought to reflect not only the health of infants, but also the overall social health of a population. The purpose of using indicators in the results accountability framework is to keep the focus on and assess progress towards desired results.

Indicator sets will always be imperfect. Those involved in producing children's "scorecards" have commented on the conceptual difficulties and competing values that must be accommodated when identifying a short list of indicators intended to convey the complex conditions of children and families. There is increasing agreement that the process of selecting results for accountability purposes must have political legitimation and must involve those responsible for achieving the results (Schorr 1995). One of the fundamental principles of Proposition 10 is inclusion and public input in every step of the planning and implementation process. If the results and indicator selection

---

[6]Adapted from Sutherland C, Shulman E, Halfon N, Gardner S, McCroskey J, *From Resources to Results for California's Children and Families: A Guide to Proposition 10 Strategic Planning and Implementation*, UCLA Center for Healthier Children, Families and Communities, 2000.

process is to be regarded as credible, useful and reflective of the community's priorities, it will have to include the input of those responsible for achieving the results, namely, service providers, as well as those who would be the recipients of programs and services, namely, parents, special-needs families and other traditionally underrepresented groups. Such an inclusive process will necessarily involve compromises, and could potentially either broaden or bias the story told by the indicators.

The Proposition 10 State Commission *Results Document* suggests pursuing four long-term strategic results:

- Improved Family Functioning: Strong Families
- Improved Child Development: Children Learning and Ready for School
- Improved Child Health: Healthy Children
- Improved Systems for Families: Integrated, Comprehensive, Inclusive and Culturally and Linguistically Appropriate Services

For each of these long-term results, a set of short-term results can be developed which lay the groundwork for achieving the longer-range goals. The *Results* document focuses on possible shorter-term results, which emphasize building the capacity of the county to provide effective supports and services to families with young children (process indicators) to support the ultimate achievement of long-term results. (Examples of these indicators can be found in Appendices B and E.)

Using a conceptual model for indicator selection

Using a conceptual model to guide the indicator selection process helps to clarify why certain indicators are selected and others are not. Since indicators are often used to decide where resources should be directed, indicator selection is as much a political as a technical process (Young, Gardner & Coley, 1994) and will be driven by both the values of the stakeholders and the research evidence supporting particular issues. It is helpful if the values of participants in the selection process are openly discussed as part of a consensus-building process.

A well-defined conceptual framework shows the linkages between the indicators and provides a context which gives meaning to child health and well-being outcomes. An example of such a framework is the Lifecourse Health Development Model (Halfon and Hochstein 2001). This model builds on the "Field Model" of the multiple determinants of health (Evans & Stoddart 1990) by adding to it a lifecourse perspective.

The Field Model[7] is holistic in that it includes and shows the interconnections between a broad range of factors (e.g., genetic factors, physical and social environments, health care, level of prosperity, and individual behavior and biology) which contribute to a child's physical, mental and social functioning, and overall well-being. (See Appendix H.) For example, a child's *physical*

[7] This description of the Field Model is adapted from "Determinants of Children's Health and Development", *L.A. Health* (Jan 2000). P Simon, C Wold, J Fielding, A Long (eds.), Office of Health Assessment and Epidemiology, Los Angeles County Department of Health Services, Public Health.

environment includes the safety of his/her home, child care site, school, and neighborhood, including exposure to toxic substances, violence, injury or infectious diseases. A child's *social environment* includes the quality of interactions and functioning of individuals and groups in the child's family, community and society at large. Social factors that can affect a child's health and development include poverty, family functioning, the educational system, social networks and the level of violence both in the home and in the community. A child's *genetic endowment* may be directly linked to a negative health outcome (e.g., congenital heart disease or oral cleft) or it may increase the risk of acquiring certain conditions later in life (e.g., developing a chronic illness such as alcoholism or schizophrenia). The value of the Field Model is that it emphasizes the broad range of determinants and multiple factors that influence a child's health, suggesting that a cross-disciplinary, multi-faceted approach should be considered when selecting indicators and developing strategies to improve children's lives.

Halfon and Hochstein (2001) have expanded on the Field Model by adding the idea of developmental "trajectories," or pathways that individual development follows over the course of a lifetime (see Appendix I). Individual trajectories are influenced by different initial endowments, as well as by risk factors and determinants that are encountered throughout the lifecourse. Protective factors such as health-promoting behaviors, healthy environments, and specific interventions, serve to improve overall trajectories. Risk factors such as poverty, exposure to or use of alcohol, drugs or tobacco, and violent home environments often result in lower overall functioning and health, and possibly accelerated declines later in life. The timing, content, and synergy of health promotion, disease prevention and developmentally appropriate interventions can have a meaningful impact on the long-term effects of those risk factors. This can be especially true during "critical" or "sensitive" periods, such as early childhood and adolescence. The recent focus on the importance of the very early years (0-3) for brain development, which sets the stage for all later development, points to this time as a critical period where successful interventions could have a significant impact on the future lifecourse trajectory of individuals.

According to the Lifecourse Health Development Model, different determinants of health and well-being will have different magnitudes of effect at different stages of the lifecourse. For example, family factors appear to be the predominant influence on the health and well-being of young children. As individuals get older, the role of individual behavior and lifestyle has a greater impact on their health and well-being.

By using a conceptual framework such as the Lifecourse Health Development Model, indicators are selected and presented in such a way that they tell a coherent story about the impact on children's well-being of multiple factors at different stages of the lifecourse. By highlighting the importance of experiences in the very early years for later outcomes, this model could provide a rationale, for example, for including indicators that capture the importance of the parent/caregiver-child interactions in the critical 0-3 years period, or that assess school-readiness at different developmental stages such as at 3 years and again at 5 years, in addition to the commonly used third grade reading scores. This would reflect the importance of monitoring what is going on earlier in the developmental course and assessing the impact of both risk and protective factors on school-readiness.

Another useful conceptual framework is that of "critical pathways" (Halfon et al. 2000). A critical pathway[8] is a mapping of the significant factors and the relationships between them that influence a specific outcome. Pathways are generally mapped in a causal sequence starting with social and economic factors, such as education and poverty, and progressing to individual behaviors related to the outcome, such as smoking or the utilization of prenatal care. The following shows a critical pathway leading to the outcome of low-birthweight babies. It includes the following determinants: poverty, public safety, access to transportation, and utilization of prenatal services.

Critical Pathway

Economic & Social Factors	→	Health Behaviors	→	Health Outcomes
Poverty Public Safety Access to Transportation		Utilization of Prenatal Services		Low birthweight

Meta-determinants are those key factors that play a significant role in multiple health outcomes. Halfon et al. (2000) found that the following meta-determinants had the greatest impact on child well-being in California:

- poverty/socio-economic status
- maternal substance abuse
- low level of maternal education
- family breakdown/unmarried status
- maternal depression
- lack of prenatal care
- child neglect
- lack of access to medical care

Mapping determinants of child outcomes in a critical pathway and identifying meta-determinants help to identify the most strategic leverage points for the allocation of Proposition 10 funds and provides a strong rationale for selecting indicators, strategies, and performance measures to track their results.

[8] This description of critical pathways is adapted from "Determinants of Children's Health and Development," *L.A. Health* (Jan. 2000). P Simon, C Wold, J Fielding, A Long (eds.), Office of Health Assessment and Epidemiology, Los Angeles County Department of Health Services, Public Health

Criteria for indicator selection

Using a set of criteria to guide the indicator selection process also provides a strong rationale for including specific indicators. We suggest the following criteria for selecting individual indicators, which are presented in the order of their significance:

1. Importance
2. Meaningfulness
3. Validity and reliability
4. Sensitivity to change
5. Availability and quality of data
6. Ability to induce action
7. Facilitates cross-systems collaboration on behalf of children

1. **Importance**: *How important is this indicator as a component or determinant of child and family well-being?*

   An indicator is considered important to the degree that it reflects a significant contribution to the health and well-being of children and families. An indicator can be important in terms of:

   - *Public policy* — It has the potential to engage policymakers or address an area of policy interest (e.g., Proposition 10).

   - *Epidemiologic principles* — It represents a significant attributable risk; that is, it accounts for a significant proportion of an undesirable result in the population (e.g., tobacco use accounts for 19% of all deaths).

   - *Community values and priorities* — It reflects values important to the community and has the potential to facilitate relationship-building and foster buy-in among diverse community sectors (e.g., school-readiness is a result of many different factors present in early childhood, for example, family literacy, quality of child care, health care, safe home environment, etc., and requires the involvement of multiple stakeholders).

2. **Meaningfulness:** *Can the public and policymakers easily understand what this indicator means and what its implications are for child and family well-being?*

   An indicator is meaningful if it reflects a common sense understanding shared across groups (including the general public, policymakers and service providers) and most people would think it was important. An indicator is likely to be more familiar and meaningful if it appears frequently in the media or other health reports.

3. **Validity and reliability:** *Does this indicator measure what it is supposed to measure?*

An indicator is *valid,* or scientifically sound, if it actually measures what it is intended to measure. A *reliable* indicator is one for which repeated measurements from a population produce similar results; it can be used reliably across diverse population groups; and data are compiled using a systematic and fair method with consistency each year.

4. **Sensitivity to change:** *Is this indicator sensitive enough to pick up and respond to the impact of interventions?*

An indicator is sensitive to change if it responds relatively quickly and noticeably to interventions made so that measurement over time has the potential of reflecting the impact of behavioral, policy or procedural change.

5. **Availability and quality of data:** *Are data readily and consistently available for this indicator?*

Once results are identified, there are numerous technical problems related to the availability, reliability and validity of key data elements, including whether:

- Data are collected regularly and routinely.
- Data are readily available from established sources on a regular (e.g., annual) basis.
- Historical data are available to provide trend data.
- If data are not compiled in one place, the information can be readily collected and compiled on an annual basis.
- The cost, time and effort of collecting new data necessary to construct the measure are feasible.
- The costs involved in purchasing or analyzing the data are reasonable.
- Data are available at the appropriate level of geographic detail.
- Variables necessary for risk adjustment are available in the data set.
- Data are of high quality, with few regular systematic reporting problems, such as misreporting, non-representativeness of the sample, or under-reporting

6. **Ability to induce action:** *Will this indicator grab the attention of the public and policymakers and help motivate action?*

Indicators are more likely to be translated into action if they grab attention, increase awareness, provide information or knowledge, engage or motivate, and link to action at the individual or population level.

7. **Facilitates cross-systems collaboration on behalf of children:** *Does this indicator reflect an issue that requires the involvement of stakeholders from different sectors of the county?*

Indicators that reflect conditions that clearly require the efforts of multiple departments, agencies and community groups are more likely to galvanize collaborative efforts and to inspire service

providers and community groups to action. Since the well-being of young children and their families clearly requires the efforts of many different partners, it is important that indicators signal the need for ongoing collaboration.

Finally, commissions can also use a set of criteria for the indicator set as a whole (as opposed to the individual indicators in the set). We suggest the following criteria:

1. **Cohesiveness:** The set of indicators is consistent with and reflects the underlying conceptual framework being used. Each indicator would reflect an aspect of the framework.

2. **Interpretability:** The set can be made meaningful to the target audience. For example, it creates "pivot points"[9] for community engagement; it generates stories about child and family well-being that help the data resonate with a lay audience of community members, including parents; it develops key messages and makes the issues it represents meaningful in terms of the lifecourse of individuals, their own assessment of risk, and the changes they might be willing to make in their own lives and be willing to support in the life of their community.

3. **Capacity to facilitate collaborations and stimulate partnerships:** The set stimulates partnerships and collaborations among community leaders and organizations involved in various aspects of children's health and well-being: health care providers, child care providers, social service agencies, schools, businesses, community-based organizations, the faith community, law enforcement, parents, etc. In order to engage a cross-section of people, the set would need to be innovative and inclusive and capture a vision of child and family well-being that would engender buy-in from diverse perspectives.

4. **Ability to improve management accountability and community health improvement.** The set can support program management and accountability as well as community education. A key role of the set would be to stimulate initiatives at the community level to support school-readiness, to monitor the effect of these initiatives over time, and to serve as the organizing framework for communicating results of these initiatives to the community on a regular basis.

Sources of indicators

When selecting indicators, the commission may want to consult other reports and organizations already tracking information for young children and families. These might include:

- CCFC *County Results and Indicators Data Collection Tool*
- State Commission *Results Document*
- Annie E. Casey Foundation KIDS COUNT reports
- Children Now annual Report Card
- Foundation Consortium, *Quality of Life Indicators of Children & Families*
- Center for the Study of Social Policy, Improved Outcomes for Children Project

---

[9] Issues that inspire collaborative action by a diverse group of people.

- *America's Children: Key National Indicators of Well-Being*, 1999
- *Trends in the Well-Being of America's Children and Youth*, 1998
- Completed Proposition 10 county strategic plans
- Local, state and national children's reports and scorecards
- Local county surveys on children and families,
- Local county children's planning collaboratives
- United Way
- The Search Institute

(See Appendix G for contact information.)

Traditional and new measures of health and development

Appendix C presents a matrix of indicators of child health and well-being used by some of the most well-known indicator reports. While commissions can make a good start by relying on available data, there is also a need for new kinds of indicators and data collection that more accurately reflect the conditions of children and their families. Appendix D gives some examples of the kinds of additional data that would be useful for tracking Proposition 10 results.

Current data systems were designed primarily to monitor compliance with federal, state and local regulations and to assure funders that resources were being used well. They focus on the negative conditions that led families to seek help rather than on the positive aspects of their lives, the "well-being" of parents and their children. Although some population-based data are also available through the census and special surveys, there is too little information on "normal" conditions, daily concerns and the realities of life in neighborhoods across the state. There has been increasing interest in developing new indicators to measure the assets and capacities of children, families and communities, in addition to needs, to present a more balanced picture of children's well-being and to allow programs and strategies to build on existing strengths and assets (Ben-Arieh 2000; Search Institute).

Certain indicators can be considered "sentinel" (i.e., warning signs of certain conditions not being in place to support optimum health and/or well-being) and "nodal" (they reflect a combination of circumstances that are important for a positive result). For example, in order to have long breastfeeding duration, the mother has to initiate breastfeeding and be supported in continuing to breastfeed. This requires that a variety of processes and supports be in place, including birth-hospital support, family support, as well as information and support from home and well-baby visits, WIC centers, the workplace, etc. Therefore, breastfeeding duration is a very important sentinel indicator of whether these processes and supports are working together in an effective and efficient way. It is nodal in the sense that it means the hospital system, the doctor's office, home visiting services, the WIC Centers and employers must all have been doing their jobs right in order to produce a positive result. In other words, many different factors have to come together and work well if that indicator is going to improve.

School-Readiness Indicators: Given the focus on school-readiness as an important outcome by the State Children and Families Commission, counties might consider the implementation of a universal kindergarten assessment in order to measure school-readiness. While the term "school-readiness" has a complex past, and a checkered recent history, new formulations of this outcome and new measures may lend themselves to easier and more accepted use. For example, the state of Maryland, as part of an early childhood initiative, will be using the Work Sampling System, developed by Sam Meisels of the University of Michigan, to assess school-readiness among Maryland kindergartners. If schools in California were to institute a kindergarten school-readiness assessment, it would permit kindergarten teachers to have a sense of the capacity and readiness to learn of entering students, and would also serve as a very useful tool to monitor the impact and effectiveness of Proposition 10. At present, the only universal assessment measure that is used in California is the Stanford Nine Test given in third grade. This type of measurement, while useful, is coming 3 to 4 years after the interventions.

It might also be important to consider how a universal assessment could be carried out for all 3-year-olds. With the growing move towards universal preschool education, some type of preschool-readiness assessment might also be instituted on a voluntary basis, but then regularized in some way. Such a preschool-readiness assessment might focus more on social-emotional issues and language development as important precursors of eventual school-readiness.

System Development: In addition to indicators of child and family development and well-being, it will also be important to track indicators of system development, coordination, collaboration and integration. If the system were more integrated or moving toward greater integration, how would we know? Appendix E provides a list of suggested indicators of service integration, accessibility and cultural appropriateness listed in the State Commission *Results Document.*

IV. Issues in Integrating and Coordinating Data Collection

Uses of outcomes and indicators for planning and monitoring

Most people who provide services for children and families are used to using data *after* programs have been implemented to evaluate their success. The results accountability approach requires that Proposition 10 commissioners and planners *begin* the planning process by defining desired results and indicators, then shaping programmatic strategies to achieve those desired results. The same results and indicators will then be used to provide a framework for program monitoring, guiding the definition of performance measures against which program results will be judged. Data from program monitoring can be used to improve and fine-tune programs, data on countywide progress toward desired results can be used to guide future funding decisions, and both kinds of data should be continuously fed back into ongoing planning. The following illustrates the kinds of activities needed to integrate and coordinate data functions to achieve both planning and monitoring purposes.

1. **Proposition 10 Commission agrees on desired results and defines the indicators that will be used to measure progress toward these results.**

> *Example*
>
> *Result: Improve health of newborns*
>
> *Possible Indicators: Birthweight, neonatal exposure to alcohol, tobacco and other drugs*

2. **A "data committee" is convened to define and oversee key data collection and monitoring functions.**

> *Key data collection and monitoring functions would include:*
>
> - *operationalizing (deciding how to measure) indicators*
> - *coordinating with the many groups that collect relevant data*
> - *reviewing data reports to determine their significance for Proposition 10*
> - *analyzing trends and making projections*
> - *providing technical assistance to commissioners and work groups*
> - *working with staff/consultants*

BEST COPY AVAILABLE

3. **Staff, consultants and data committee members work with planning group(s) to educate them about issues, terminology and data requirements, helping them to become comfortable with using data to inform planning. (The designated leaders need to take a hands-on approach because many commissioners will be uncomfortable working with data, preferring to see this as a "technical" function that is outside their experience or sphere of influence.)**

> *Activities might include:*
>
> - *training sessions for commissioners and interested community participants on using data for planning*
> - *meetings with work groups to discuss the specific data issues associated with key topic areas*
> - *using examples to work through the process of moving from results to indicators to performance measures*

4. **Staff and consultants review the research literature for promising strategies, best practices and data on program effectiveness that may be helpful in planning. They also solicit reports from local service providers (who may not have written up their findings in a formal manner) on effective strategies.**

> *Example*
>
> *In Los Angeles County the Department of Mental Health commissioned a panel of experts from UCLA to search the literature for program strategies that have been successful in reducing the mental health problems of young children and their families. Other reports in this series provide similar information.*

5. **Staff, consultants and data committee members work together with local service providers and service recipients to design a core set of performance measures that will be used to assure program quality, monitor accountability and track success for each major programmatic strategy pursued (including system integration). The "core set" of measures should be clear, practical, applicable across programs and not unduly time-consuming for service providers. These performance measures would be used for individual programs and across allied programs (i.e., those that address the same indicator).**

BEST COPY AVAILABLE

Example

Indicator: Access to health care

"What works" strategy: Community outreach to increase enrollment in Medi-Cal, Healthy Families and participation in the CHDP (Child Health and Disability Prevention)

Possible performance measures for community outreach strategy:

	Quantity[10]	**Quality**
Input *(Process)*	*# of persons contacted* *# in each region/city* *demographic characteristics*	*% eligible but not enrolled in Medi-Cal and Healthy Families* *% participating in CHDP*
Output *(End Result)*	*# of persons enrolled/participating*	*% enrolled who regularly see a health provider* *% participating in CHDP who received services determined to be needed*

[10] For further explanation of this format for presenting performance measures, see Friedman, M. *Results Accountability for Proposition 10 Commissions: A Planning Guide for Improving the Well-Being of Young Children and Their Families*, in N Halfon, E Shulman, M Hochstein and M Shannon, eds., Building Community Systems for Young Children, UCLA Center for Healthier Children, Families and Communities, 2000.

BEST COPY AVAILABLE

When developing performance measures, there are several points to keep in mind:[11]

- It is important to clarify the target population, service delivery boundaries and strategies of the program or agency being measured.
- Both process/capacity measures and end results are important. Process measures are useful in the early stages of developing a results accountability system when there has not been time to achieve end results; more end-result measures will be added over time. Process measures are also important throughout the process when linked to specific results. The linkage between process measures and end results needs to be continuously measured, since it is only through understanding how the process is related to an end result that communities and service providers know on which lever they can pull in order to achieve their desired results. Since most results have many steps along the pathway and several different processes that can lead to the desired result, it is only by continuously measuring the process measures that one understands where and how the change is taking place and can make adjustments. This knowledge serves as the basis for continuous quality improvement systems.
- In the table shown above, the most important measure is "customer/client" results in the lower right quadrant (e.g., improvements in skills, attitudes, behavior, circumstances).
- There should be a method at the county level to oversee and be responsible for results accountability across programs and systems so that similar programs are measuring similar results.
- In order to track outcomes, most agency programs need to go beyond their currently available data, using, for example, customer/client surveys and trained observer ratings. Agencies will vary in their capacity for data collection.
- Data should be collected, analyzed and reported internally at least on a quarterly basis.
- Breakouts by geography, client demographic characteristics, organizational units providing the same service, by difficulty of the incoming workload, and by type and magnitude of service enable users to identify where and under what conditions programs and services appear to be more successful or less successful.
- Results need to be compared to other data, e.g., the previous year's performance or other benchmarks.
- Appropriate explanatory information helps to clarify the performance data.
- All levels of agency personnel should be trained in a results orientation, not just upper-level officials and/or managers.

Compared to program evaluation, the performance monitoring approach has both benefits and drawbacks. The primary benefits are:

---

[11] This section was developed from the following sources: Hatry, HP. *Performance Measurement: Getting Results.* The Urban Institute Press, Washington, D.C, 1999 and Friedman, M. *Results Accountability for Proposition 10 Commissions: A Planning Guide for Improving the Well-Being of Young Children and Their Families*, in N Halfon, E Shulman, M Hochstein and M Shannon, eds., Building Community Systems for Young Children, UCLA Center for Healthier Children, Families and Communities, 2000.

- Performance monitoring builds on a framework of indicators that are clearly defined and spelled out in advance of program implementation.
- Performance measures are standardized, allowing for easy comparison across programs.
- Standardized approaches may save money by not requiring a new evaluator and evaluation plan for each program.

The primary drawback is that, without careful analysis of the context of each program, performance data do not, by themselves, explain why and how the outcomes occurred. If program participants improve, is their improvement the result of the program, other factors, or some combination of the two? Although "gross" improvements may have occurred, what percentage of improvement can be attributed to the "net" effects of the intervention? Given the complexity of program evaluation, however, many experts believe that it makes more sense to invest in comprehensive performance monitoring approaches for all programs. In this approach, more intensive program evaluation designs would be reserved for well-established programs whose staff feels comfortable with program design and operations, and for which there is some reasonable evidence of success from tracking performance.

6. **Staff, consultants and data committee members identify key sources of available data countywide, developing partnerships with the agencies and organizations that collect and maintain these data sources (including adding representatives to the data committee). It is important to understand that maintaining complete data on children, families and communities does not fall under the jurisdiction of any one organization – rather there are many different kinds of organizations that collect data relevant to commission purposes (also the Commission's definition of "relevance" will change over time). Don't assume that the Commission has to collect and maintain all of the data it will need; assume, rather, that it will develop a broad range of partnerships that will enable it to find data when needed.**

Key data sources might include:

- *County departments that serve young children and their families, such as public social services, health, mental health, probation, courts, district attorney*
- *City departments including parks and recreation, libraries, social service departments, and child care coordinators*
- *School districts and County Offices of Education*
- *Child care resource and referral agencies*
- *United Way*
- *Information and referral agencies*
- *Head Start programs*

Some new sources of data will undoubtedly also be needed to augment available data using techniques such as questionnaires, surveys, focus groups and parent interviews. Thus it will be desirable for county commissions to commit a portion of their Proposition 10 resources toward building data capacity within their counties. Smaller counties can partner regionally with other small counties or with a larger county nearby to facilitate data collection and sharing.

BEST COPY AVAILABLE

7. **Identify a team of researchers/evaluators to develop appropriate evaluation methodologies and to analyze data. This may include commission staff as well as contracted evaluators. Part of their responsibility should be to provide *ongoing* feedback to program operators to fine-tune and improve programs.**

8. **Provide annual reports to decision-makers and the public. This could be in the form of a countywide scorecard tracking the conditions of young children and their families. Ideally there should be several versions of the scorecard for different geographic regions of the county and/or for different ethnic groups.**

Advocates have pointed out some of the difficulties of using data to develop action strategies to improve the conditions of children and families. One problem is that some people do not understand or are not comfortable with data in a spreadsheet format. They may not know how to read or interpret the data, or it may be presented at an aggregate level (for example, statewide or countywide) when they want to take action in their own communities, or the indicators may not point directly to practical action. For example, figuring out strategies to decrease the number of families who live on incomes below the poverty level can be overwhelming to the even the most dedicated activists. Other kinds of indicators — such as the number of children who have access to free or reduced price breakfasts at school — may make more sense for a local action agenda.

Countywide report cards can be a useful tool for presenting data in a format that can educate and inform the broader public as well as policymakers in a more user-friendly way. When designed well, report cards tell the stories behind the indicators, including the reasons why the findings are what they are, the direction in which trends are heading, how the indicators are interrelated, and the implications of the trends for the county as a whole, as well as for specific subpopulations. Report cards can be designed in an attractive, accessible format presenting information in multiple ways (e.g., text, pie charts, line graphs, quotations, photographs), while avoiding overwhelming the reader with numbers and tables. By providing interpretive text and linking the indicator information to existing and potential action in the community, report cards can help to create the bridge between data and action. The Proposition 10 Commission can collaborate with other countywide data efforts to produce a report that demonstrates the linkages of Proposition 10 activities to others related to children and families.

In response to the expressed need for user-friendly data on smaller areas (smaller than states, counties or cities), several national foundations are focusing on the development of community- or neighborhood-level data that could be made widely available to community-based groups. For example, the National Neighborhood Indicators Partnership is a collaborative effort between the Urban Institute in Washington, DC, and local partners around the country to further the development and use of neighborhood-level information systems in local policy making and community building. All local partners in this initiative have, or intend to build, locally self-sustaining advanced information systems with integrated and recurrently updated information on neighborhood conditions in their cities. These information systems are designed to facilitate the direct use of information by local government and community leaders in order to build the capacities of distressed urban neighborhoods. (See Appendix G: Websites and Online Resources.)

9. Feed findings on program effectiveness back into the planning process so that the commission becomes a "learning organization," one that builds on its successes, acknowledges its mistakes, moves on, and strives to refine its vision and improve its operations.

One of the most important aspects of the results-based approach is assuring that all of those involved in planning receive regular feedback on how the projects are implemented, what works and what doesn't and key lessons learned in the process. This means that someone (or many people) will need to spend time translating the "data" (statistics, numbers, charts) into "information" that is useful and accessible to a broad range of people. It is easy for researchers who have become familiar with the intricacies of spreadsheets, tables and graphs to assume that everyone sees the same things they do in an array of numbers. Many people are intimidated by numbers, don't know who to interpret "raw" data, or can't make the leap from specific findings to their general implications for Proposition 10 planning.

Proposition 10 Commissions that value informed community input in the planning process, will make the extra effort to assure that findings are interpreted for several different kinds of audiences (i.e., parents, service providers, policymakers). For example, in England the Department of Health, the primary sponsor of research on health and well-being, requires researchers to produce a number of versions of their reports directed to different audiences concerned with the issue (Department of Health 1995).

10. Use data to "tell the story" of Proposition 10. What results are the Commissions seeking? What has been achieved? What has been learned?

One way to use findings of results-based strategies is to "tell a story" about what happened and why it happened that way. This requires stepping back and giving a broad overview. Rather than writing a typical research report, authors should try to describe what the Proposition 10 Commission had in mind in funding the strategies it did, what happened as a result of implementing those strategies and what was learned in the process, in terms understandable to a lay audience. The notion of telling a story goes further than just cutting out the jargon or simplifying the research findings, it requires that the authors keep in mind the essential elements of a good story – that it has a storyline, emotional appeal and conveys the essence of what happened.

Using existing information systems

Many of the information systems already in place in each county collect data relevant to Proposition 10. Although most were designed for reporting to funding sources, not for planning, these data can be useful if ways can be found to integrate or at least to analyze data across systems. Integrating data on children and families from many different systems into one integrated database has been a dream in many localities, but there are so many difficulties that it has seldom been accomplished. These challenges include both technical and political hurdles):

> "The technical issues are probably all too familiar: stove piped legacy data systems, none of which easily communicate with each other, and each employing just enough idiosyncrasies of attribute definition as to confound any but the most fearless (or ignorant).
>
> The "political" issues were those — also familiar, I suspect — of turf-protection and general suspicion that, in the wrong hands, "our" data will be "mis-used" or, at best, "misunderstood." (Murphey 1999: 77)

Commissions in most counties will face at least some of the following technical issues especially endemic to bureaucratic, government-operated information systems:

- separate systems for different departments or functions that rely on different kinds of (usually outdated) hardware and software, guided by different standards and criteria;
- different ways of defining essential data elements, including the unit of focus (family, child, household, etc.), geography (census tracts, zip codes, cities, school districts, etc.) and services used (visits, days in care, "slots," etc.);
- different reporting periods (average daily attendance in schools, monthly welfare roles, etc.);
- inability to track individual children over time or across systems;
- inability to derive an unduplicated count of individual children served (because the system counts things like immunizations given, CHDP visits, etc., rather than the children who receive them);
- difficulty matching data on children served by more than one system;
- different definitions of data elements which are mandated by state and federal government departments (and therefore not under local control);
- difficulties in negotiating confidentiality protections; and many more.

Proposition 10 commissions may want to draw on the efforts of existing statewide groups that are trying to improve data integration. For example, the Family Outcomes Project has convened a number of experts from across the state to improve data collection and integration (see Resources). In a project funded by the Stuart Foundation, the Healthy Start Field Office and the California Center for Community-School Partnerships at UC Davis have helped to integrate data on school sites for school-based Healthy Start projects.

Because of the many difficulties of matching data across systems, people in some counties have investigated the possibility of assigning each person a single identifier that could be used across county departments. The most obvious possibility is the Social Security Number, but the potential negative impact on privacy of using such a widely recognized number would be considerable. Others have suggested that county government departments could construct a process for assigning identifiers that could be used across departments (for example, first two letters of first name, first four digits of street address, etc.). To our knowledge, little progress has been made in this effort.

Even if it is not possible to integrate the many different data systems that could provide useful information, it should be possible to develop agreements under which agencies will provide comparable data so that commission staff and evaluators can use a standard analytic framework to assess data. Commissions should also identify a local research team (from higher education or community-based agencies) that can provide knowledge of the research literature and advice about data analysis and evaluation methods.

In terms of the political issues, Proposition 10 commissions will need to understand the local "map" of data sources in order to negotiate working partnerships with a broad range of organizations that collect and analyze relevant data. Proposition 10 recognizes the interdependence of all of those who work with and on behalf of young children and their families, and most commissions will quickly realize their own reliance on others for accurate, timely data.

Creating new data sources

Since many potentially important data elements are not available, Proposition 10 commissions will need to think about creating new data sources or partnering with others to enhance existing systems. Methods include:

- creating new countywide data coalitions;
- assembling countywide or local population data in one place (e.g., working to identify the best available data and to post these data sets on the web);
- using focus groups and parent interviews;
- influencing state departments to adapt mandatory data elements in current reporting systems;
- influencing development of local data systems;
- creating Proposition 10-specific data systems; and
- requiring data collection for evaluation purposes in all community programs or in all programs in a particular service sector (e.g., child care).

The Center for Collaboration for Children, California State University at Fullerton
The Early Care and Education Needs Assessment (ECENA)

The Center for Collaboration for Children at California State University at Fullerton in Orange County (see Resources) is conducting The Early Care and Education Needs Assessment (ECENA), a set of 11 linked studies and activities that will compile a wider array of information on early care needs in Orange County than has ever been assembled. Funded by the Proposition 10 Commission, Head Start of Orange County and prospectively, the Social Services Agency, the study seeks to answer the following questions:

1. What are the current early childhood care and education options in Orange County?
2. Which groups of parents utilize which kinds of care, and why?
3. How do parents and teachers define quality early childhood education?
4. How do parents and teachers define school-readiness (the characteristics that make a child ready for kindergarten)?

The ECENA uses several different strategies to answer these questions:

1. Parent surveys
2. Provider survey
3. Provider focus groups
4. Elementary teacher survey
5. Elementary teacher focus groups
6. Service data analysis
7. Review of prior studies

The first step in this process is the parent survey. This phone survey is currently being conducted, and addresses the following:

1. Who are the parents of young children in Orange County? (An assessment of demographic characteristics such as age, ethnicity, geographic distribution and education.)
2. What kind of early care are parents of young children currently using?
3. Why did parents choose their current care arrangements?
4. Are parents satisfied with their current care, and why (or why not)?
5. How do parents define quality early childhood education?
6. How do parents define school-readiness (the characteristics that make a child ready for kindergarten)?

Issues of primary data collection will be somewhat different for the smaller, rural counties, where the resources available to gather data can be limited. Smaller counties can conduct face-to-face outreach using locations frequented by parents such as markets, shopping malls, and schools to conduct surveys. In Sierra County, for example, efforts were made to contact every parent in the county through such in-person surveys. Using outreach workers from the target communities to conduct local surveys can also be an effective method, as was done in Santa Cruz County.

A source of data that will be available to counties in the near future is the California Health Interview Survey (CHIS). CHIS will survey 55,000 households throughout the state, including a sample of 6,000 children ages 0-4. The survey focuses principally on public health and access to health care. There is a special Child Core for CHIS which includes questions in the following areas: child's health status (physical, behavioral, mental, dental); health care (utilization, providers, barriers); preventive health behaviors; nutrition; health insurance coverage; child care; and demographics. Currently, the Child Questionnaire emphasizes health conditions, health behaviors, health care utilization and insurance coverage. As recommended by their technical advisory group, the CHIS development team is looking at ways to include more indicators on child development in future surveys, which will be even more relevant to Proposition 10 issues.

BEST COPY AVAILABLE

CHIS will generate statewide estimates for California, plus local-level estimates for counties with populations of 40,000 or more. Estimates for most counties will include breakouts by age groups and ethnic groups, depending on sample size. CHIS has the flexibility to expand sample size to allow for more extensive sampling for any given group or geographic area in order to improve the reliability of these estimates. CHIS data can be used to:

- assess and monitor the health of populations, both statewide and locally, including prevalence of chronic conditions, communicable disease, social and physical environmental health, and quality of life;
- more accurately measure health insurance coverage and access to health services at the local level and for smaller population groups statewide, including the effectiveness of public programs, such as Medi-Cal and Healthy Families, in meeting their needs;
- assess the health and development of children, both statewide and locally, including social and physical development, parent-child relationships, prevalence and management of chronic conditions, access to preventive and other health services;
- identify underserved populations, specific health problems and the impact of welfare reform and managed care; and inform and support funding opportunities for special populations and local jurisdictions; and
- assess community needs as required of Medi-Cal managed care contractors, hospitals serving Medi-Cal beneficiaries, and all nonprofit hospitals.

CHIS will operate in 2-year cycles, with data collected every second year. The first 24-month cycle began July 1, 1999, and continued through June 30, 2001. Data collection is expected to begin July 2000, be completed 9 months later, and be ready for release in summer 2001.

No one "owns" or can "control" all of the data that will be needed to fully understand the impact of Proposition 10. It is also important to understand other major initiatives that affect the lives of young children and their families that may overlap with Proposition 10 (especially welfare reform, other tobacco taxes, state surplus funds). Most counties will not have the data infrastructure in place to monitor the impact of Proposition 10, and will need to invest a portion of their funds to support such data activities.

Developing a data infrastructure

Many county commissions will want to develop or join existing data-oriented partnerships that can provide an ongoing infrastructure for cross-organizational data sharing. This "infrastructure" should focus on the people and groups who have regular access to data and enhanced data-analysis skills, and on those who can help to turn reams of data into information that is useful both to commissions and to the many other groups concerned about children and families.

Commissions should plan to reserve a portion of their funds to invest in the development of such a collaborative data infrastructure to inform planning and monitoring of funded services and to ensure that Proposition 10 dollars are being allocated in the most effective and efficient way. Such a

collaborative and integrated data infrastructure provides the opportunity for adequate monitoring of program and population-level results, which in turn supports the development of comprehensive, integrated systems of care.

In Los Angeles County, the Board of Supervisors recently approved the establishment of an Integrated Services Branch in the Chief Administrative Office (CAO), which will include a Strategic Planning Data Center (SPDC). The CAO and the Children's Planning Council will be joint leaders of the SPDC to promote sharing and analysis of data across county departments, as well as to develop partnerships with institutions of higher education and community-based organizations concerned with data. The two primary goals of the SPDC are to enable policy decisions and plans to be soundly based on data and to enhance tracking of program effectiveness. The State Commission can help by working to negotiate similar partnerships between the state government departments whose services most affect young children and their families. A reasonable estimate of the amount of money that should be invested in research, including collection of countywide trend data as well as performance measurement, would be 5-10% of annual funds. This is the range allotted to research and evaluation by most of the large federally funded demonstration projects. In addition, commissions should plan to invest up to another 5% in the first year or two to develop an adequate data infrastructure to support results-based planning and accountability.

Alameda County Children and Families Commission
ECChange

Alameda County was the first county in the state to appoint a Children and Families Commission, to develop a strategic plan and to begin implementing that plan. The data and monitoring system now being developed in Alameda County is called ECChange. ECChange is a web-based, integrated, cross-agency, secure information system designed specifically for the Alameda County Children and Families Commission "Every Child Counts" (ECC) program. ECChange enables the unique identification, tracking and monitoring of families receiving ECC services and informs the accountability and evaluation components of the ECC. The system is a secure network that promotes accessibility to and exchange of information and services from any entry point into the system and respects the privacy and confidentiality rights of children birth to 5 years and their families. The requirements of the system were developed by cross-agency workgroups. ECChange assists the commission by performing the following functions:

- Registers and uniquely identifies children, families, and early childhood educators receiving ECC services.
- Maintains a family/household record that includes children, primary caregivers and other household members.
- Collects core data elements such as birth name and date as well as confirmatory data elements such as Social Security Number and a mother's maiden name. Additional data are collected for case management, outcome indicator reporting, billing, or data needed to meet funding requirements.
- Provides a mechanism to trigger the deployment of Public Health Nurse Home Visits within 48-72 hours after a newborn is discharged from the hospital.
- Enables all agencies providing home-visiting services to perform data entry during home visits by using hand-held devices or laptops.
- Shares data with Alameda County agency systems that are participating in Every Child Counts.
- Provides standardized and ad hoc reporting programs from which data can be exported into statistical packages such as SAS and SPSS.
- Protects client confidentiality through strict security protocols which control access that is appropriate to agency and user type, and documents client's informed consent to share information.
- Automates data exchange between databases: vital statistics (AVSS), Public Health Nursing System (NRS), Social Services data systems (CWSCMS and CDS), Adolescent Family Life Program (Lodestar), the state Common Application Transaction System (CATS), as well as other databases.

The ECChange information system can be accessed via the World Wide Web using established Internet standards. In addition, it provides sophisticated data analysis and a robust security framework.

There are several software packages developed by private vendors that are currently available for purchase by county commissions to assist them with program management, evaluation efforts and other aspects of their operations. These applications have the capacity to capture program-level information required for county- and state-level evaluation reporting. The document, *Program Management/Evaluation Support Systems for County Children and Families Commissions: An Assessment of Technology and Service Options*[12] analyzes software systems developed by three vendors: Advanced Business Software (ABS), Corporation for Standards and Outcomes (CS & O) and Pran Infotech, Inc. The analysis discusses the strengths and drawbacks of each system and is designed to provide county commissions with the information they need to make an educated decision on which software product or technological approach would best meet their program management and evaluation support needs.

[12] Published by the Proposition 10 Technical Assistance Service Center (TASC). (See Appendix G: Publications.)

BEST COPY AVAILABLE

The Corporation for Standards and Outcomes
Outcomes Collection, Evaluation and Reporting Services (OCERS)

The Corporation for Standards and Outcomes (CS&O) has developed a comprehensive approach for managing the design, implementation and maintenance of an Outcomes Collection, Evaluation and Reporting Services (OCERS) system for California Children and Families Commissions. OCERS is a combination of services provided by CS&O that will enable county commissions to collect, analyze and report countywide data, trends and program outcomes through a central Internet application. OCERS provides commissions with the capability to report on the long-term outcomes achieved for each child served and each project funded, along with short-term milestone goals and achievements toward fulfilling project objectives and indicators. OCERS answers such questions as:

- To what extent did the commission achieve its goals as defined in the Strategic Plan?
- What are the nature and extent of the services provided by commission grantees and the extent to which they achieved their individual evaluation objectives?
- How intensive were the presenting health and human service needs of the children and families served by the commission's programs?
- What short- and long-term outcomes were achieved, and which service delivery models and processes had the most impact?
- How were the funds allocated across outcome domains specified in the commission's Strategic Plan, and how much did the achieved outcomes cost?

The software package is supported by an experienced team of evaluation experts who provide ongoing and intensive technical assistance. The Orange County Children and Families Commission began working with CS&O in April 2000 to design a comprehensive outcomes collection and reporting service to manage its Proposition 10 funds. In February 2001, CS&O began working with Contra Costa County and in June 2001 with Kern County to track and report its outcomes and contract information.

This type of software system has the potential to offer tremendous support to many county commissions. However, the cost of such a system may be out of reach for many commissions. It is best suited to the budgets of larger counties, or to a collaborative group of counties with smaller budgets.

Telling the story

Ultimately, data should help the commission to "tell the story" of Proposition 10 to many different constituencies with different perspectives, values, assumptions and attitudes. The set of outcomes and indicators selected should provide a clear roadmap of the priorities of the commission, its goals and its values. Data-based reports should demonstrate how the commission is approaching its planning tasks, why it has chosen its priorities, and ultimately how effective its strategies have been.

> Data can increase the quotient of rationality in planning, policy development and resource allocation decisions, whether at the program, agency or service system level. Data help people to understand their assets and problems and to create shared visions and hope for the future. Using data, people from different perspectives can often find common ground, agreeing on the results they want to achieve, their priorities for action and the indicators that will demonstrate joint progress toward improving the well-being of the children, youth and families in

BEST COPY AVAILABLE

their communities. Data-driven decision-making processes can also help decision-makers hold people accountable for the results that want to achieve. (McCroskey 1999: 1)

Tools to facilitate the effective use of data and help tell the story of Proposition 10

The following are specific tools that can be employed to facilitate the effective use of data. Proposition 10 commissions may want to invest in these and other tools which would be helpful in planning for and understanding the impact of Proposition 10:

- *Data matching*, or electronic matching of individual case files to determine the number of cases served by more than one system, can be a useful technique to better understand where the highest needs for services may be, where to locate new facilities and where to focus resources.
- *Resource mapping* or *asset mapping* uses geographic information systems (GIS) to map locations of facilities and informal resources, identify administrative districts, and overlay population factors.
- *Children's budgets* provide analysis of annual state, county, municipal and other expenditures targeted to children and families.
- Projections, or *trend analyses,* assess change in key indicators over time, tracking past rates of change to make predictions about future conditions.
- A *common set of definitions*, or data dictionary, can provide some uniformity across data systems. Although many systems will not be able to change definitions immediately (especially if definitions have been mandated by funders), a shared direction for the future can be extremely helpful.
- *Net-based information sharing* provides immediate access to key data through the Internet rather than requiring exchange of disks or paper reports.
- Reporting key indicator data both countywide and in small *geographic area reports* will help community partners find the data most relevant to their own planning and service delivery. For example, reports could include data by school attendance areas, zip codes and census tracts.

Need for training

Because many of these uses of data are relatively new, ongoing training will be required for planners, program providers, community members and decision-makers. To begin with, training is needed to help commissioners and their community partners develop a shared vocabulary and processes to inform results-based decision-making. Involvement of community members in all data-related training activities is essential to assure trust, facilitate communication and encourage collaborative decision-making.

V. Recommendations on Funding and Using Results-Based Decision Making

Proposition 10 commissions across the state will need to develop results-based planning and accountability processes quickly in order to assure commissioners and the public that funds are being well used. The following are our recommendations on how to get where we need to be as quickly and efficiently as possible.

1. *Build on existing systems.* Using available data whenever possible makes sense both for programmatic and for financial reasons. Collaborative approaches to sharing data and improving existing systems will benefit not only Proposition 10, but will enhance the entire child and family service system.

2. *Integrating existing data systems is a strategic investment.* A strategic-investment approach would suggest that commissions invest in improving databases that are shared across systems, including development of common definitions, Internet-based information sharing, data matching, small-area data reporting and geographic information systems. For example, all county health departments must collect select maternal and child health indicators for state reporting requirements. These data can be better integrated – for example, birth certificates linked to prenatal risk assessment. Similarly, birthweight data could be linked to school reference data for years later.

3. *Invest in a countywide and statewide data infrastructure.* Whether formal or informal, a collaborative group focused on data should include representation from the many groups that can help turn reams of data into useful information. Where such an infrastructure does not exist, Proposition 10 commissions should invest some portion of their funds to develop a data group to inform ongoing planning and monitoring of funded services. The State Commission can help by involving the state departments most concerned with young children and their families in a parallel statewide effort. It will be essential for the State Commission to take a leadership role in data generation and/or in helping counties develop the capacity to collect data for themselves. Because many smaller counties either do not have the capacity to do adequate data collection or are not aware of what is needed to build their capacity, the state should consider developing a clearinghouse for state and county data, "best/promising practices," and technical assistance around data issues.

4. *Invite investment from local funders.* Local foundations and businesses may be willing to supplement investment in these data efforts if they see the long-term advantages of having better data about what works for children and families.

5. *Develop a research agenda.* Commissions should use their experiences to create research agendas that will help them develop better indicators, address unanswered questions and suggest directions for the future. Many local researchers would be glad to focus their inquiries on questions relevant to local decision-makers, if they knew the key questions that commissioners and other decision-makers were seeking to answer. Partnerships with higher education and community-based research groups could provide more information to help children and families sooner than could commissions acting on their own.

6. *Share lessons learned with other commissions (the State Commission and county commissions) and with the public.* The most difficult lessons to share are not about what worked, but about what didn't work. No one likes to highlight one's mistakes, but if we admit that we all make them, it will become easier to share experiences and to work together to build a better future for all the children of California.

VI. Appendix A: Language Translation Key

PROPOSITION 10 GUIDELINES TERMS	OTHER COMMONLY USED TERMS	PROPOSITION 10 GUIDELNES DEFINITION	LEVEL OF MEASUREMENT	EXAMPLE
GOAL/ STRATEGIC RESULT	DESIRED OUTCOME/ RESULT	A long-term (5-10 years) statement of desired change based upon the vision statement.	Whole population	Healthy children
OBJECTIVE	TARGET	A precise description of desired change that is short-range and measurable and that supports the achievement of the goal.	Whole population	The number of children born drug-exposed in X county will be reduced to Y by 2001.
OUTCOMES	INDICATORS	The actual measure of the extent to which results are being achieved.	Whole population	The number of reported substance-exposed births in X County in a given year.
STRATEGIES	STRATEGIES	The course of action taken to achieve stated goals and objectives.		Create or expand residential treatment services for substance-abusing pregnant women in X County.
INDICATORS	PERFORMANCE MEASURES	Specific process or performance measures that are used to determine whether programs, services or projects are achieving goals and objectives.	Program target population	Quantity: Number of women served by a residential treatment program for substance abusing pregnant women. Quality: Percent of babies born drug-free among the women participating in the treatment program.

Source: Sutherland, C, Shulman, E, Halfon, N, Gardner, S, McCroskey, J, *From Resources to Results for California's Children and Families: A Guide to Proposition 10 Strategic Planning and Implementation,* UCLA Center for Healthier Children, Families and Communities, 2000.

VII. Appendix B: Examples of Indicators of Short-Term Results from the State Commission "Results" Document

I. Long-Range Strategic Result: Improved Family Functioning/Strong Families

Short-term result:

1. Increased capacity to provide parenting education

    Example indicators:

    - Number of parent education classes/opportunities available either in the classroom or delivered through other means (e.g., home visitation, etc.)
    - Number of parents/prospective parents participating in parent education classes and other educational opportunities

2. Increased capacity to provide parent support services

    Example indicators:

    - Number of families served by home visitation programs
    - Number of families served in family resource centers

II. Long-Range Strategic Result: Improved Child Development/Children Learning And Ready for School

Short-term result:

1. Increased capacity to serve infants and children in licensed and accredited child care facilities

    Example indicators:

    - Number of accredited family child care homes and child care centers
    - Availability of child care options for families with alternative work schedules

2. Increased supports and educational opportunities for all child care providers

    Example indicators:

    - Access to and support for unit-bearing continued education courses and training for child care providers
    - Establishment of incentive/compensation programs linked to higher levels of training and longevity

3. Increased access to licensed family child care and center-based child care

Example indicator

- Number of child care resource and referral services

4. Increased capacity to serve children with special needs

Example indicator

- Number of children with developmental delays and other special needs who have access to quality child care programs in typical environments

5. Increased readiness for kindergarten

Example indicators

- Number of child care providers receiving training about school readiness
- Number of children who receive mental health and developmental screenings and appropriate referral services
- Availability and use of family literacy programs

III. Long-Range Strategic Result: Improved Child Health/Healthy Children

Short-term result:

1. Increased health service capacity in Proposition 10 target areas (such as perinatal services, immunizations, mental health assessment, child health screenings)

2. Increased maternal access to perinatal health care services

Example indicators

- Number of women enrolled in existing or new programs providing prenatal services to women
- Percentage of infants born with healthy birthweights

3. Increased child access to health, mental health and dental services

Example indicators

- Percent of children with up-to-date immunizations at age 2 and at kindergarten entry
- Number of children with dental caries, especially untreated dental caries

4. Increased child access to early screening and early intervention for developmental delays and other special needs

   Example indicator

   - Number of referrals of children to existing or new services for screening and early intervention for developmental delays and other special needs through expanded interagency relationships and training

5. Increased family access to smoking, alcohol and substance abuse cessation/treatment supports

   Example indicator

   - Number of pregnant women accessing smoking, substance-abuse or alcohol treatment services

6. Increased child access to good nutrition and exercise

   Example indicators

   - Number of infants who are breastfeeding
   - Community offerings of affordable and accessible activities promoting physical activity for families with young children

7. Increased child access to healthy and safe environments

   Example indicators

   - Number of families who use tobacco in their homes
   - Number of accidents related to guns

For a complete list of suggested indicators, see California Children and Families Commission. (1999). Results.

VIII. Appendix C: Matrix of Existing Child Well-Being Indicators

INDICATOR	*America's Children (national)*	*KIDS COUNT (states)*	*Children Now (Calif.)*	*Foundation Consortium*	*Los Angeles County Scorecard*	*Santa Barbara County Scorecard*	*Orange County Annual Report*
Economic Security							
% children in poverty	X	X	X	X	X	X	
% children in extreme poverty (below 50% of poverty)		X					
Median family income		X		X			
% children receiving free-reduced school lunch program				X	X	X	X
Child support orders and collections per cases		X		X			X
% families receiving Temporary Assistance to Needy Children (TANF)/CalWORKs				X	X	X	X
% of births to unmarried mothers/single-parent families		X		X		X	
% of children under age 18 living with parents with at least one parent employed full-time all year	X						
% of children living with parents who do not have full-time, year-round employment		X					
% of households with children under age 18 that report any of three housing problems	X		X				
% of children under age 18 in households experiencing food insecurity with moderate or severe hunger	X						
% of births covered by Medicaid		X					
% of children under age 18 covered by health insurance	X	X	X		X		
% of children covered by Medicaid or other public-sector health insurance		X					
% of children under age 18 with no usual source of health care	X						
Child care costs			X	X		X	X
# of licensed child care spaces per 100 children				X	X		
# of request for child care						X	X
Services to homeless children						X	

INDICATOR	*America's Children (national)*	*KIDS COUNT (states)*	*Children Now (Calif.)*	*Foundation Consortium*	*Los Angeles County Scorecard*	*Santa Barbara County Scorecard*	*Orange County Annual Report*
Health							
% of children under age 18 in very good or excellent health	X						
% of children ages 5 to 17 with any limitation in activity resulting from chronic conditions	X						
Number of children who have been identified as having a developmental disability and utilized services							X
Live birth rate per 1,000 population				X			
% of low-birthweight infants (weighing less than 5.5 pounds/2,500 grams at birth)	X	X	X	X	X	X	X
Infant mortality (deaths in the first year of life) per 1,000 live births	X	X	X	X	X		X
Maternal death rate per 100,000 live births				X			
# of substance-exposed infants born							X
% of pregnant women receiving prenatal care in the 1st trimester			X	X			
% of children ages 19 to 35 months who received combined series immunization coverage	X	X			X	X	X
% of kindergarten students who have not been adequately immunized				X			
Number of participants served by supplemental food/nutrition program							X
% of children age 2 to 5 with a good diet	X						
% of children with iron deficiency anemia				X			
Deaths per 100,000 children 1 to 4 (or 1 to 14 or 0 to 17)	X	X		X	X		
Tuberculosis cases reported					X	X	
HIV/AIDS cases reported					X		
Births per 1,000 females ages 15 to 17 (or 15-19)	X	X		X	X	X	X
% of teen births to mothers who smoked		X					
Children served by the Mental Health/Behavioral Health Department					X	X	X
Good air quality days – ozone standard met					X		

INDICATOR	*America's Children (national)*	*KIDS COUNT (states)*	*Children Now (Calif.)*	*Foundation Consortium*	*Los Angeles County Scorecard*	*Santa Barbara County Scorecard*	*Orange County Annual Report*
Education							
% of births to women who have not completed high school				X			
% of children ages 3 to 5 who are read to every day by a family member	X						
% of children ages 3 to 4 who are enrolled in preschool	X						
% of eligible children enrolled in Head Start			X				
% Limited-English-Proficient students				X			X
Average mathematics scale score of 9-year-olds	X		X	X			X
Average reading scale score of 9-year-olds	X	X	X	X			X
% of young adults 18 to 24 who have completed high school/high school graduation rate	X				X	X	
% of teens who are high school dropouts		X		X		X	X
Safety							
Confirmed child abuse cases/ cases opened			X	X	X	X	X
Deaths related to child abuse			X				
Infants and children in foster care			X	X	X	X	X
Adoptions: children placed					X		X
Children and women using emergency shelter services						X	
Gun-related injuries and deaths/homicide rates among youths under 18			X		X		
Rate of serious violent crime victimizations per 1,000 youths age 12-17	X						
Serious violent crime offending rate/arrests per 1,000 youths age 12 to 17	X	X		X	X		X
Juvenile in probation caseloads and out-of-home placements						X	
Motor vehicle accident injuries and deaths among children under age 6			X		X		

Sources:
America's Children: Key National Indicators of Well-Being, 1999.
KIDS COUNT, Annual.
Children Now Report Card, Annual.
Foundation Consortium.
United Way of Greater Los Angeles and Los Angeles County Children's Planning Council, 1999.
Kids Network and the University of California, Santa Barbara, Graduate School of Education, 1998.
Orange County Children's Services Coordination Commission, 1999.

BEST COPY AVAILABLE

IX. Appendix D: Data Development Agenda

Two organizations — Children Now and the California Report Card/County Databook Advisory Committee — believe that the following data are essential to future planning for young children and their families at the county level, yet are currently unavailable:

- The number of children waiting for child care spaces
- The availability of high-quality, affordable child care
- Children's preschool attendance
- Number of children without health insurance
- Number of toddlers up to date on their immunizations
- Children's dental health
- Cases of asthma, developmental delays and other prevalent conditions for young children
- Children's housing status and conditions
- Parent education levels and employment status
- Rates of maltreatment of young children

Other kinds of data that would be useful to further our understanding of how well children and families are doing include:

- Rates of maternal depression
- Number of babies born substance-exposed
- Number of parents reading to children weekly
- School-readiness at age 5
- Language abilities through age 3
- Food security of families with young children
- % of family income spent on housing/adequacy of housing
- Homeless families with young children
- Rates of preventable childhood diseases and disabilities

X. Appendix E: Examples of Indicators Related to Service Integration, Accessibility and Cultural Appropriateness Presented in the State Commissions *Results* Document

Increased Service Integration

- Joint community planning efforts and decisions on revenue maximization and fund allocations.
- Number of agencies and groups collaborating to provide integrated services who have signed Memorandums of Understanding with core players outlining their goals and roles. This includes addressing such issues as facilitation of entry into the service system, coordinated service delivery, shared information and non-duplication of effort.
- Number of service providers with interdisciplinary training.

Increased Accessibility of Services

- Number of families who access services via conveniently located service sites, sites that co-locate multiple service providers, and/or multidisciplinary home-based services.
- Availability of services to working families through flexible scheduling.
- Availability of quality services to families of children with special needs through training of service providers (such as child care) to serve children with special needs or expanding the capacity of providers with expertise in special needs to meet a broader range of needs.

Increased Cultural Competence in Service Provision

- Numbers and types of child and family services available in locally appropriate languages other than English.
- Numbers of service providers who are ethnically and culturally reflective of their communities.
- Numbers and types of cultural diversity training (such as ESL, culturally specific food ways and healthcare practices) available and delivered to providers of services to children and families.

Increased Public Engagement in Policy

- Number of service recipients participating on policy boards and in program implementation.
- Number and frequency of public input opportunities (such as hearings, focus groups and surveys).
- Availability of and parent participation in public policy and advocacy training.

XI. Appendix F: Principles for Using Outcomes and Indicators

(Adapted from Outcome Measurement for Family and Children's Services in Los Angeles County, drafted for the Los Angeles County Children's Planning Council by J. McCroskey, August 1992.)

1. Outcomes should be expressed as positive expressions of child and family well-being rather than absence of negative conditions (i.e., good health rather than decreased illness). Many of the indicators which measure those outcomes based on available data will, however, be phrased in the negative because that is how data are currently collected.

2. Since no one indicator captures the full dimensions of outcomes sought, outcomes should be measured by a small set of indicators based on valid and reliable data from multiple sources. (Commissions should also recognize that trying to change too many indicators at once will dilute the possible impact of Proposition 10 funds.)

3. Initial efforts should focus on a strategic set of outcomes and indicators that reflect concerns shared by the entire community.

4. The process of developing practical and appropriate outcomes and indicators that accurately reflect the conditions of children and families is an evolutionary one, from which there is much to learn. Clarification of the cultural and community values which underlie the process is essential.

5. The process should include experimentation with technical matters, including assessment of the accuracy of available data, sensitivity of indicators to change over time, identification of proxy indicators that reflect desired outcomes, and improvements in existing information systems. The inclusion of multiple disciplines and perspectives is crucial since no one group is expert in all of the substantive areas which must be combined to reflect overall child and family well-being.

XII. Appendix G: Resources

Websites and Online Resources

America's Children: Key National Indicators of Well-Being, 1999.
HTML browsable and PDF copies: http://childstats.gov
Printed copies: National Maternal and Child Health Clearinghouse at (703) 356-1964 or nmchc@circsol.com for a free copy; or, if free copies run out, the Government Printing Office (hhtp://www.gpo.gov or (202) 512-1800, publication # 065-000-01162-0)

California Health Interview Survey (CHIS)
UCLA Center for Health Policy Research
10911 Weyburn Avenue, Suite 300
Los Angeles, CA 90024
Email: chis@ucla.edu
Website: www.healthpolicy.ucla.edu

The Child Indicator: The Child, Youth and Family Indicators Newsletter.
c/o Child Trends
4301 Connecticut Ave., NW, Suite 100
Washington, DC 20008
childindicator@childtrends.org

Children Now
1212 Broadway, 5th Floor
Oakland, CA 94612
Phone: (510) 763-2444
Fax: (510) 763-1974
Email: children@childrennow.org
Website: http://www.childrennow.org

Connect for Kids
Website: http://www.connectforkids.org/listserv1579/listserv.htm

Federal Interagency Forum on Child and Family Statistics
Website: http://childstats.gov

KIDS COUNT
c/o Annie E. Casey Foundation
701 St. Paul St.
Baltimore, MD 21202
Phone: (410) 547-6600
Fax: (410) 547-6624
Website: http://www.aecf.org/kidscount

National Neighborhood Indicators Project (NNIP)
The Urban Institute
2100 M Street, NW
Washington, DC 20037
Website: http://www.urban.org/nnip

The Results and Performance Accountability Implementation Guide
Website: http://www.RAGuide.org

Trends in the Well-Being of America's Children and Youth
Website: http://aspe.hhs.gov/hsp/98trends/trends98.htm or call (202) 619-0257.

The Work Sampling System (a kindergarten school-readiness assessment)
(Developed by S. Meisels, J. Jablon, D. Marsden, M. Dichtelmiller, and A. Dorfman)
Website: http://www.rebusinc.com/index2.html

Publications

County of San Diego Health and Human Services Agency. *San Diego County Child and Family Health and Well-Being Report Card*. San Diego: Author, 2000.

Fielding JE and Sutherland CE. *National Directory of Community Health Report Cards*. Chicago: Health Research and Education Trust, 1998.

Kids Network and the University of California, Santa Barbara, Graduate School of Education. *Santa Barbara County Children's Scorecard*. Santa Barbara: Author, 1998.

Smith M. *Program Management/Evaluation Support Systems for County Children and Families Commissions: An Assessment of Technology and Service Options*. The Proposition 10 Technical Assistance Service Center, Center for Health Improvement, June 2001.

Sutherland C, Shulman E, Halfon N, Gardner S, McCroskey J. *From Resources to Results for California's Children and Families: A Guide to Proposition 10 Strategic Planning and Implementation*, UCLA Center for Healthier Children, Families and Communities, 2000

Sutherland C and Fielding JE. *Creating Effective Community Health Report Cards*. UCLA Center for Healthier Children, Families and Communities, 2001.

Relevant Experts/Organizations

The Alameda County Children and Families Commission
Mark Friedman, Executive Director
1850 Fairway Drive
San Leandro, CA 94577
Phone: (510) 667-7575
Fax: (510) 614-8850
Email: mfriedma@co.alameda.ca.us
Website: http://www.ackids.org

Center for Collaboration for Children
California State University Fullerton
Sharon Milburn, Ph.D.
Department of Child and Adolescent Studies
College of Human Development and Community Service
Phone: (714) 278-2930

Greg Robinson, PhD, Director
Social Science Research Center
Phone: (714) 278-2600
Website: http://www.ecena.org

The California Children and Families Association
Contact: Steve Ladd
Kern County Children and Families Commission
2724 L Street
Bakersfield, CA 93302
Phone: (866) To-CCAFA
Email: info@ccafa.org
Website: http://www.ccafa.org

The California Children and Families Commission
501 J Street, Suite 530
Sacramento, CA 95814
Phone: (916) 323-0056
Fax: (916) 323-0069
Website: http://www.ccfc.ca.gov

Corporation for Standards and Outcomes (CS & O)
65 Enterprise
Aliso Viejo, CA 92656
Phone: (800) 587-7861
Fax: (949) 330-8081
Website: http://www.csando.com

Family Health Outcomes Project
University of California, San Francisco
Gerry Oliva
3333 California Street, Suite 365
San Francisco, CA 94118
Phone: (415) 476-5283
Fax: (415) 502-0848
Email: fhop@itsa.ucsf.edu
Website: http://www.ucsf.edu/fhop

The Finance Project
1000 Vermont Avenue NW
Washington, DC 20005
Phone: (202) 628-4200
Website: http://www.financeproject.org

The Fiscal Policy Studies Institute
8 Charles Plaza, Suite 1407
Baltimore, MD 21201
Phone: (410) 659-9745
Fax: (410) 659-9753
Email: xfpsi@aol.com
Website: http://www.resultsaccountability.com

Foundation Consortium
2295 Gateway Oaks Drive, Suite 100
Sacramento, CA 95833
Phone: (916) 646-3646
Website: http://www.foundationconsortium.org

Sid Gardner, M.P.A.
President
Children and Family Futures
4940 Irvine Blvd., Suite 202
Irvine, CA 92620
Phone: (714) 505-3525
Fax: (714) 505-3526
Email: sidgardner@home.com
Website: http://www.cffutures.com/index.html

Healthy Start Field Office and the California Center for Community-School Partnerships
CRESS Center
University of California, Davis
1 Shields Avenue
Davis, CA 95616-8729
Phone: (530) 752-1277 or (530) 754-6343
Website: http://hsfo.ucdavis.edu/ccc-sp.html

Jacquelyn McCroskey
Associate Professor
USC School of Social Work
Montgomery Ross Fisher Building
Los Angeles, CA 90089-0411
Phone: (213) 740- 2004
Fax: (213) 740-0789
Email: mccroske@rcf-fs.usc.edu

Sam Meisels
Professor, School of Education
University of Michigan
School of Education
3210 SEB
Ann Arbor, MI 48109
Phone: (734) 647-0621
Email: smeisels@umich.edu

Proposition 10 Technical Assistance Center
California Center for Health Improvement
1330 21st Street, Suite 100
Sacramento, CA 95814
Phone: (916) 930-9200
Fax: (916) 930-9010
E-mail: Prop10TA@centerforhealthimprovement.org
Website: http://www.cchi.org/cgi-bin/cchi/default.asp

The Search Institute
700 South 3rd Street, Suite 210
Minneapolis, MN 55415
Phone: (612) 371-8955
Website: http://www.search-institute.org/assets

UCLA Center for Healthier Children, Families and Communities
10945 Le Conte Avenue, Suite 1401
Box 956939
Los Angeles, CA 90095-6939
Phone: (310) 825- 8042
Fax: (310) 206-3180
Website: http://healthychild.ucla.edu

UCSF Child Services Research Group
44 Montgomery Street, Suite 1450
San Francisco, CA 94104
Phone: (415) 502-6174

XIII. Appendix H: The Multiple Determinants of Health Model

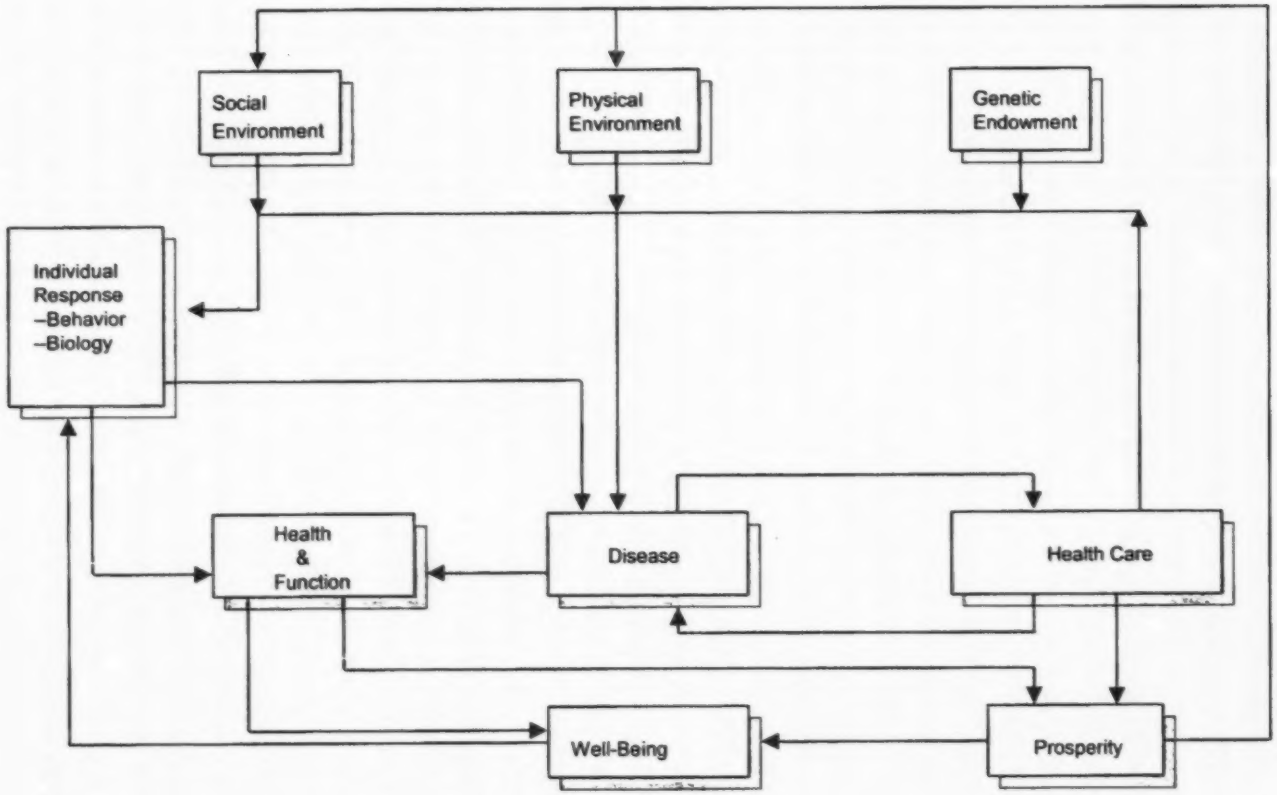
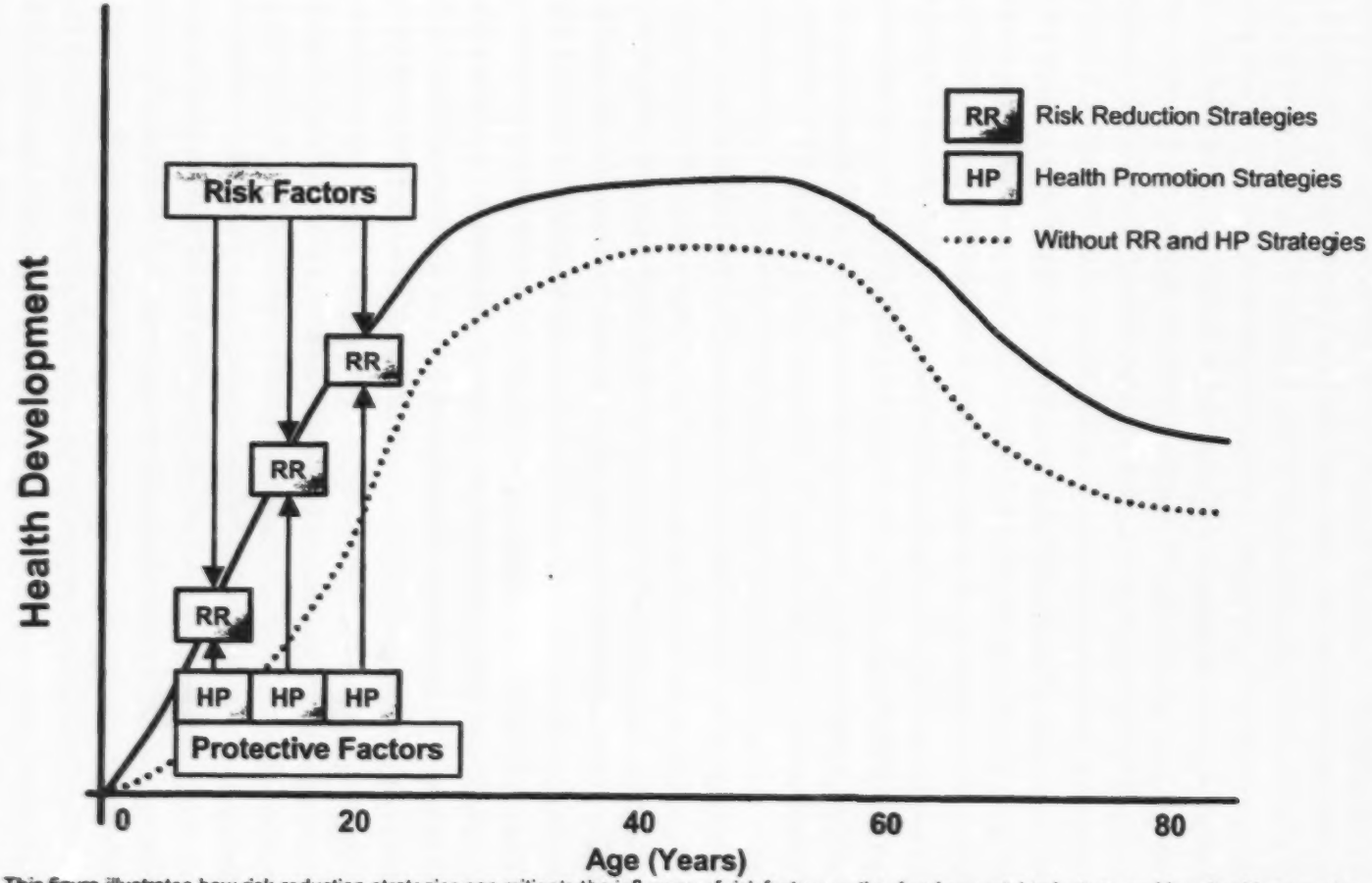


FIGURE 1: THE MULTIPLE DETERMINANTS OF HEALTH MODEL. "Multiple determinants" models of health production illustrate the different kinds of factors (eg. social, physical, genetic) that determine health, and the pathways through which these factors create health. Multiple determinants models have played an important public policy role, broadening the range of issues that are understood to be health issues, and illustrating the relationships between environmental, social and economic factors. Adapted from: Evans, Robert G., et al. [eds.] *Why Are Some People Healthy and Others Not? The Determinants of Health Populations* . New York: Aldine de Gruyter. Copyright 1994, Walter de Gruyter Inc., New York.

XIV. Appendix I: Influence of Risk-Reduction and Health Promotion Strategies on Health Development



This figure illustrates how risk-reduction strategies can mitigate the influence of risk factors on the developmental trajectory, and how health-promotion strategies can simultaneously support and optimize the developmental trajectory. In the absence of effective risk reduction and health promotion, the developmental trajectory will be suboptimal (dotted curve).

BEST COPY AVAILABLE

XV. References

America's Children: Key National Indicators of Well-Being, 1999. HTML browsable and PDF copies available at http://childstats.gov.

Andrews JH. (1996). Going by the numbers. Planning 62(9): 14-18.

Ben-Arieh A. (2000). Beyond welfare: measuring and monitoring the state of children - new trends and domains. Social indicators research 00: 1-23.

Cazes B. (1972). The development of social indicators. In A. Shonfield & S. Shaw (Eds.) Social Indicators and Social Policy. London: Heinemann Educational Books: 9-20.

California Children and Families Commission. (1999). Guidelines: A Resource for Developing Proposition 10 Strategic Plans.

California Children and Families Commission. (1999). Results.

Child Trends. (2000). The child indicator. The Child, Youth and Family Indicator Newsletter. 2(1): 3. Available at http://www.cd.gov/nccdphp/dash/yrbs/ov.htm

County of San Diego Health and Human Services Agency. (2000). San Diego County Child and Family Health and Well-Being Report Card.

Crosby AW. (1997). The Measure of Reality: Quantification and Western Society 1250-1600. Cambridge: Cambridge University Press.

Dear M. (Ed.) (1996). Atlas of Southern California. Los Angeles: University of Southern
California Southern California Studies Center.

Department of Health. (1995). Policy research programme: Providing a knowledge base for health, public health and social care. London: Department of Health.

Evans RG & and Stoddart GL. (1994). Producing Health, Consuming Health Care. In R.G. Evans RG, Barer ML & Marmor TR. (Eds.). Why Some People Are Healthy and Others Not?: The Determinants of Health of Populations. New York: Aldine DeGruyter.

Foundation Consortium. Quality of Life Indicators for Children and Families. A product of the County Collaborative Reform Network Learning Circle. Sacramento, CA.

Gardner S. (1994). Community Report Cards: Making Kids Count. Fullerton, CA: Center for Collaboration on Children, California State University at Fullerton.

Halfon N & Hochstein M. (2001). Life course health development: An integrated framework for developing health and financing health intervention. Submitted for publication.

Halfon N, Ebener P, Sastry N, Ahn PL, Cherman L, Hernandez J, Wong D & Wyn R. (2000). California Health Report. RAND Corporation. Prepared for the California Wellness Foundation. DRU-1592-TCWF.

Halfon N, Newacheck P, Hughes D, Brindis C. (1998). Community health monitoring: Taking the pulse of America's children. Maternal and Child Health Journal, 2(2): 95-109.

Hatry HP. (1999). Performance Measurement: Getting Results. Washington, DC: The Urban Institute Press.

Hauser RM, Brown BV & Prosser WR. (Eds.). (1997). Indicators of Children's Well-Being. New York: Russell Sage Foundation.

Institute of Medicine. (1997). Improving Health in the Community: A Role for Performance Monitoring. Washington, DC: National Academy Press.

Institute of Medicine. (2001). Committee on Quality of Health Care in America. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: National Academy Press.

KIDS COUNT. (Annual). Annie E. Casey Foundation, http://www.aecf.org/kidscount.

Kids Network and the University of California, Santa Barbara, Graduate School of Education. (1998). Santa Barbara County Children's Scorecard.

Lasch T & Siegel H. (1976). The state of the child, New York City, New York: Free Press.

McCroskey J. (1999). Getting to Results: Data-Driven Decision-Making for Children, Youth, Families and Communities. A What Works Policy Brief. Sacramento: Foundation Consortium.

Melkers J & Willoughby K. (1998). The state of the states: Performance-based budgeting requirements in 47 out of 50. Public Administration Review, 58(1): 66-73.

Murphey DA. (1999). Presenting community-level data in an "outcomes and indicators" framework: Lessons from Vermont's experience. Public Administration Review, 59(1): 76-82.

Norris T et al. (1997). The Community Indicators Handbook: Measuring Progress Toward Healthy and Sustainable Communities. San Francisco: Redefining Progress.

Orange County Children's Services Coordination Commission. (1999). Annual Report on the Conditions of Children in Orange County. Orange, CA: Orange County Children's Services Coordination Commission.

Poister TH & Streib G. (1999). Performance measurement in municipal government: assessing the state of the practice. Public Administration Review, 59(4): 325-335.

Santa Cruz County Council for At-Risk Youth. (1990). The Santa Cruz Report Card: The State of Our Children. Santa Cruz, CA: Santa Cruz County Council for At-Risk Youth.

Schorr L. (1995). The Case for Shifting to Results-Based Accountability. Washington, D.C.: Center for the Study of Social Policy.

Search Institute, http://www.search-institute.org/assets

Shonfield A & Shaw S. (Eds.) (1972). Social Indicators and Social Policy. London: Heinemann Educational Books.

Smecker C. (1989). State Policymaking for Children. In Wald M & Kirst M. (Eds.). The Conditions of Children in California. PACE: University of California at Berkeley. pp 323-332.

United States Department of Health and Human Services. (1998). Trends in the Well-Being of America's Children and Youth. Washington DC: Office of the Assistant Secretary for Planning and Evaluation.

United Way of Greater Los Angeles and Los Angeles County Children's Planning Council. (1999). Los Angeles County Children's Scorecard.

United Way of Santa Cruz County. (2000). Santa Cruz County Community Assessment Project Comprehensive Report. Capitola, CA: United Way of Santa Cruz County.

Wald M & Kirst M. (Eds.). (1989). The Conditions of Children in California. PACE: University of California at Berkeley.

Young N, Gardner S & Coley S. (1994). Getting to outcomes in integrated service delivery models. In Young N, Gardner S, Coley S, Schorr L & Bruner C. Making a difference: Moving to Outcome-Based Accountability for Comprehensive Service Reforms. Des Moines, IA: National Center for Service Integration.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

☒ This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (3/2000)

P5030575